SECTION 30

DEEP LIFT ASPHALT BASE

30-1.01 Description. - This work shall consist of constructing an asphalt concrete base specified as "deep lift asphalt base" to the lines, grades, and dimensions shown on the plans and in accordance with these City standard specifications.

Deep lift asphalt base is classified by grade as follows:

Grade A - High quality asphalt concrete produced in a batch or drier-drum mixing plant.
Grade B - Asphaltic base mixture as specified in the special provisions.

30-1.02 Materials. -

30-1.02A Grade A. - Grade A deep lift asphalt base shall be Type B 3/4" maximum, medium grading asphalt concrete produced by batch mixing or drier-drum mixing conforming to the provisions of Section 39, "Asphalt Concrete" of these standard specifications.

30-1.02B Grade B. - Grade B deep lift asphalt base shall be of a composition specified in the special provisions, and produced in a mixing plant conforming to the provisions of Section 39, "Asphalt Concrete" of these standard specifications or mixed in place on the roadbed as specified in the special provisions. Grade B may contain Recycled Asphalt Pavement (RAP) that meets the requirements of the special provisions.

30-1.03 Equipment. - Proportioning, mixing, spreading, and compacting equipment shall conform to the provisions of Section 39, "Asphalt Concrete" of these standard specifications and as specified herein.

On contracts where the total amount of asphalt base is 350 tons or less, towed-type pavers may be used with the approval of the Engineer.

All equipment used for spreading and placing base material shall be equipped with a 12-foot straightedge.

30-1.04 Placing. - Deep lift asphalt base shall not be placed when the atmospheric temperature is 50°F or below or when the weather is foggy or rainy unless otherwise allowed by the Engineer. Deep lift asphalt base shall be placed only when the surface is dry and in satisfactory condition. In case of sudden rain, the Engineer may permit the placement of base then in transit from the plant, provided that the subgrade is free from pools of water, and the mixture is laid and compacted at the proper temperature.

Immediately prior to application of prime coat, the subgrade of the area to receive deep lift asphalt base shall conform to the compaction requirements and grade tolerance of Section 21, "Subgrade Preparation," unless otherwise permitted by the Engineer.

Prime coat, tack coat or paint binder shall be applied to the areas to receive deep lift asphalt base in accordance with the provisions of Section 36, "Penetration Treatment" of the standard specifications. Sand cover, where required, shall be

spread over primed areas designated by the Engineer. All loose sand shall be completely removed from the primed grade before placing any additional material thereon.

Deep lift asphalt base shall be spread at a temperature of not less than 260°F nor greater than 310°F and all initial rolling or tamping shall be performed when the sum of the air temperature and the temperature of the mixture is between 300°F and 375°F. Intermediate rolling shall be accomplished while the mix temperature is at or above 180°F. No layer shall be placed over a layer which exceeds 0.25-foot in compacted thickness until the temperature at mid depth, of the layer which exceeds 0.25-foot in compacted thickness, is not more that 160°F.

Deep lift asphalt base course mixtures shall be spread and struck off with approved spreading and placement equipment in accordance with the provisions of Section 39-5 "Spreading and Compacting" of Caltrans Standard Specifications.

Blading equipment, if approved by the Engineer to place deep lift asphalt base course mixtures, shall be operated by only skilled and experienced operators and a qualified grade checker shall accompany each blade.

Towed-type pavers and spreaders, if approved to place deep lift asphalt base course mixtures, shall be towed at a uniform speed for any given setting of the screed or strike-off gate. The hopper shall be kept full of material during paving operation to assure a full, even spread.

In unconfined areas, deep lift asphalt base shall be 0.25 foot minimum and 0.42 foot maximum in compacted thickness. In confined, narrow areas, the thickness may be increased to 0.75 foot, provided the density and surface tolerance of the base is obtained.

30-1.05 Compacting. - After spreading, deep lift asphalt base course mixtures shall be compacted in accordance with the provisions of Section 39-6.03, "Compacting" of these standard specifications.

The completed deep lift asphalt base course shall have an average density of at least 98 percent of the laboratory density, based on the Job-Mix Formula for the asphalt mixture when tested in accordance with California Test 304 and ASTM D1188, California Test 308, or California test 375. The laboratory compacted specimens will be composed of the same materials in like proportions as the job-mix formula.

30-1.06 Surface Tolerance. - The surface of the completed deep lift asphalt base shall be true to line, grade, and cross section and shall be free of ridges, ruts or depressions. The finished surface shall not deviate at any point more than 0.03-foot from the bottom of a 12-foot straightedge applied parallel with, or at right angles to the centerline or base line. Each lift, except base surface lift, placed by a motor grader shall be true to cross section for that lift with a tolerance of not more than 0.05-foot when tested with a 12-foot straightedge in any direction.

30-1.07 Measurement. - Deep lift asphalt base will be measured by the ton of the combined weight of the mixture actually used in the work. The weight of the completed mixture shall be determined as provided for in Section 9-1.01, "Measurement of Quantities" of these standard specifications.

30-1.08 Payment. - Deep lift asphalt base course mixtures will be paid for at the contract unit price per ton.

The above contract price and payment shall be full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in constructing deep lift asphalt base complete in place, as shown on the plans, as specified in these specifications and as directed by the Engineer.